

An

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inaugural Dissertation,

On the Influenza as it appeared in the  
State of Delaware in 1807;

with some observations on the nature  
of the disease.

Submitted to the examinations

of

John McDowell, L.L.D., Provost,  
the Trustees, & Medical Professors

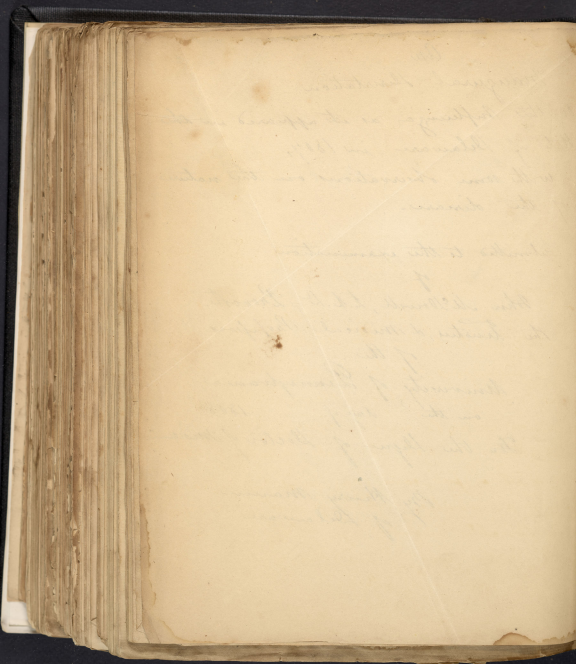
of the

University of Pennsylvania,

on the day of 1808.

For the Degree of Doctor of Medicine.

By Henry Martin  
of Delaware

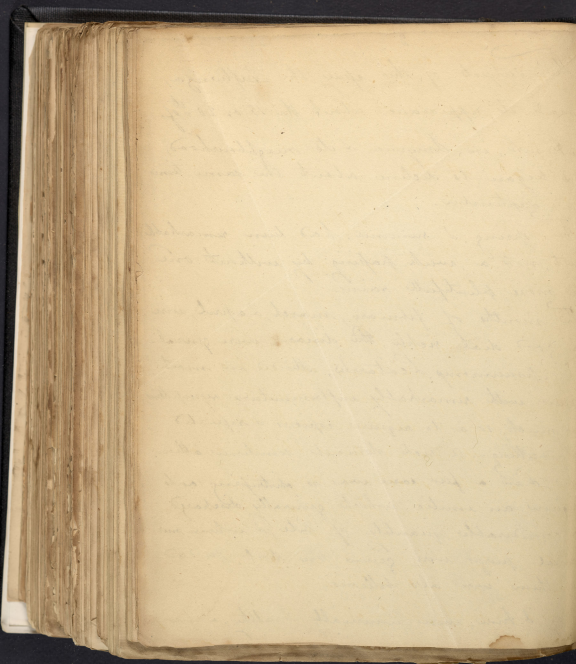


The subject of this essay the Influenza, made its appearance about the 15 or 20<sup>th</sup> of August, in Smyrna & its neighbourhood; & began to decline about the same time in September.

The spring, & summer, had been remarkably wet, not a week passing by without one or more plentiful rains.

The months of february, march, & april, were a good deal sickly; the diseases were generally, pneumonia, & catarrhs, attended in most cases with remarkably inflammatory symptoms, so much so as to require copious & repeated bloodletting - a sick stomach sometimes attended, & in a few cases was so distressing as to require an emetic, which generally discharged a considerable quantity of bile, & when mercurial purges were given the stools produced by them were also bilious.

May, & June, were unusually healthy, a few





cases of fever occurring thro, which were generally of the inflammatory type, & in most instances attended with local determinations to the chest; in these cases the bilious symptoms also attended.

About the 13<sup>th</sup> of May, I was called to a young woman, who I found labouring under an inflammatory fever, which had been brought on by getting her feet wet; she had no cough, & complained of no pain, except in her head; I took near a pint of blood from her, & left a cathartic for her to take; the next day a pain in the side came on, with a troublesome cough, for which I prescribed a blister to be applied to the pained part. The third day I saw her the second time, bled her again, & once on the succeeding day; the fifth day from the time I first saw her, I saw her again, found her with very little cough, & her pulse nearly natural. Her skin & eyes were now extremely yellow attended with nausea, & great inclination to vomit; I



immediately gave her an emetic, which discharged a considerable quantity of bile; during her illness, she had taken two or three cathartics, which had produced bilious stools. In a few days she recovered.

From the circumstance of bilious symptoms uniformly attending the inflammatory cases which occurred during the spring months, I expected that remitting, & intermittent fevers, would be very prevalent the ensuing fall, particularly if August, & September should be dry; but this was not the case, for the season throughout from April until the latter end of September, was remarkably wet, & from this circumstance intermittent, & remitting fevers were very rare.

Might not the absence of autumnal fevers, have been owing in part also to the universal <sup>prevalence</sup> of the Influenza? Agreeable to the third law of epidemics, viz that no two epidemic fevers of different forces, brought



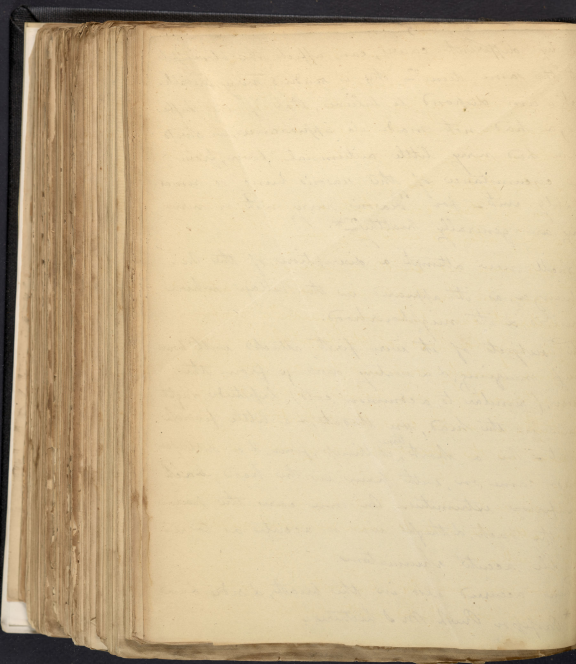
on by different causes, can affect the blood <sup>up</sup> at the same time? this is rendered very probable. Yet I am disposed to believe, that if the Influenza had not made its appearance, we should have had very little autumnal fever, from the circumstance of the season's being so remarkably wet - for seasons very wet or very dry are generally healthy.\*

I shall now attempt a description of the Influenza, as it appeared in the village where I resided, & its neighbourhood.

The subjects of its <sup>first</sup> attack with hoarseness, sneezing, & a watery discharge from the nose; (similar to a common cold) lassitude, slight pain in the head, sore throat, & a little feverish habit. In a short <sup>time</sup> chilliness, fever, & a distressing cough came on, with pain in the head, back & inferior extremities. In some cases the pain in the back, & thighs, was so acute as to resemble acute rheumatism.

Pains occurred also in the breasts, & sides; & in

\* Professor Rush M.D. lectures.



two or three cases which came under my notice, the patients complained of distressing pain in the region of the scrobiculus cordis, extending round on the right side to the back, in the course of the junction of the diaphragm with the false ribs.

In two or three cases that I heard of, the disease was attended with a pain in the ear.

The eyes were red, swollen, & watery.

The pain in the head was variously situated in different cases, but was generally confined to the neighbourhood of the frontal sinuses.

The fever generally continued two or three days, and afterward gradually declined in the form of a remittent. In most cases, the patients being charact. of fever in the afternoon, & early parts of the evening.

The cough, continued a week or two, & in a few cases longer, after the patients were in other respects perfectly well.

The skin was generally dry, but in a few cases the disease was attended with profuse perspiration.





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In a few cases nausea, & vomiting attended the disease, but this was by no means common. Where the disease was so violent as to confine the patients to bed, the bowels were generally affected with costiveness; but in a few rare cases diarrhoea attended.

The pulse in almost every case indicated the presence of inflammatory diathesis, & its tension corresponded with the violence of the disease.

I was told by an old physician of the place where I reside, that the disease produced miscarriage, & abortions, in two or three cases of pregnant women that came under his care.

A great many persons from imprudent exposure to night air, fatigue, &c. while labouring under a slight attack of influenza, were seized with most violent pneumonia.

by Professor Rush, that epidemics generally

\* Dr. Rush takes notice of a case of this kind in his treatise on influenza.



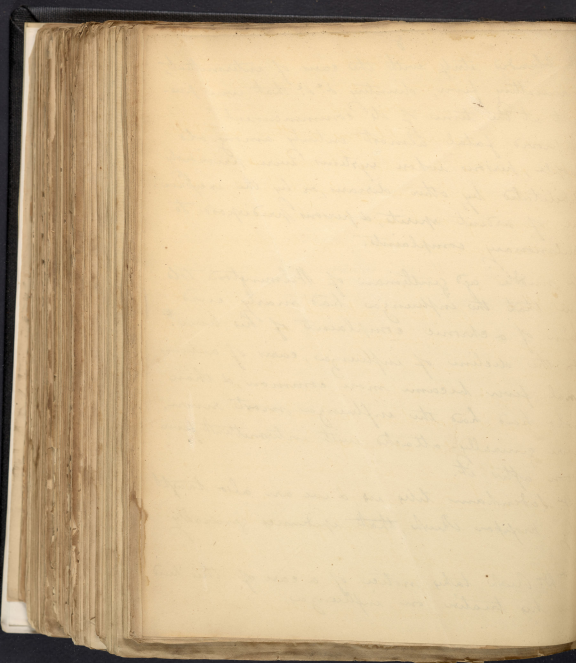
It blended itself with the cases of intermittents, & remitting fever, dysentery &c. &c. that were present at the time of its commencement.

It proved fatal almost entirely among old people, persons whose systems were previously debilitated by other diseases, or by the excessive use of ardent spirits, & persons predisposed to pulmonary complaints.

A middle aged gentleman of Wilmington, told me, that the influenza had nearly cured him of a chronic complaint of his liver.\* On the decline of influenza, cases of autumnal fever became more common, & those who had had the influenza most severe, were generally attacked with intermittent fever soon after it.

Dr. Sidenham tells us, & we are also taught by professor Rush, that epidemics generally

\* Dr. Rush takes notice of a case of this kind in his treatise on influenza.



come on with great force, & become milder afterwards - This was precisely the case with the influenza as noticed by me, for in the beginning it required bleeding, & other antiphlogistic remedies to subdue it; whereas in the close the pediluvium, & plentiful draughts of warm sap, or balm tea, to excite a perspiration, were all that was necessary.

Cure. - On the treatment of this disease, I was governed entirely by the state of the system. When the inflammatory diathesis was considerable, I bled the patient & gave him a cathartic; sometimes calomel & jalap, but I found greater advantage from cream of tartar, or glauber salts, than from any other cathartic medicine that I used - with these remedies were used, febrifuge powders of opium, tartar emetic, & calomel - tepid diluent drinks & the antiphlogistic regimen. When the inflammatory symptoms were not





efficiently subdued by one bleeding, the operation was repeated; but there was ~~few~~ cases that required more than one or two bleedings, except in those where from imprudent exposure, fatigue, &c symptoms of pneumonia were induced. These cases of pneumonia were unusually violent, & required copious, & repeated bloodletting to subdue them.

Altho the epidemic was attended with a very inflammatory diathesis in some cases, yet in a majority of cases bleeding was not necessary; in such cases I generally gave a cooling purge, (cream tart: or Glauber salts) & made use of sweating remedies, with the antiphlogistic regimen.

Sweating was found peculiarly useful in almost every case, particularly where there was much pain. The pains in the back, limbs, &c were always relieved, & in some cases entirely removed, in a few hours after perspi.

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ration had been excited.

The sudorifics that were used, were the pediluvium, & plentiful draughts of any mild diuretic drinks; sage tea was most commonly used; I used a weak decoction of the Eupatorium perfoliatum in a few cases, & found that perspiration could be excited more certainly by it, than by any of the teas that are in common use for this purpose.

When a plentiful perspiration could not be excited by pediluvium, & tepid drinks alone, I gave at the same time small doses of emetic tartar, or antimonial wine.

The cough was best managed by the use of anodine medicines; the paracoric elixir of the shops was generally used for this purpose. I found the following formula a very convenient one in the management of the cough,

℞ Common Paracoric Elixr. — ℥i  
 Suc. Glycyrr. 6℥. Arab. aa — ℥i  
 Vin. Antim. gutt LXXX mil C  
 aqua Mille — — — ℥x

M. Coch. quæ hora 2nda



my the use of this <sup>12</sup> the cough was generally  
allayed, & perspiration induced.

Hundreds of persons had the disease so slight  
as to do nothing for it.

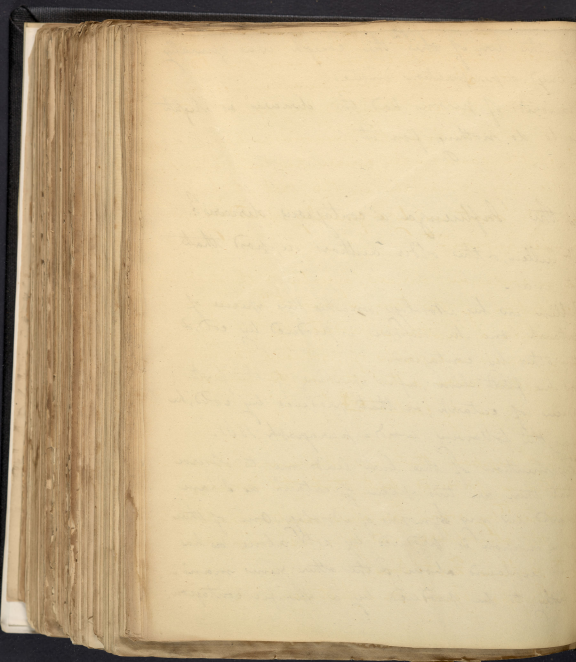
Is the Influenza a contagious disease?

Dr. Cullen, & the older authors suppose that  
it was.

Cullen in his Nosology makes two species of  
catarrh; one he supposes is produced by cold, &  
the other by contagion.

In his first lines, after speaking of the first  
species of catarrh, or that produced by cold, he  
has the following words - paragraph 1061.

"The mention of this last leads me to observe  
that there are two species of catarrh as I have  
marked in my Synopsis of Nosology. One of them  
as I suppose is produced by cold alone as has  
been explained above, & the other seems mani-  
festly to be produced by a specific contagion."



Of such contagious catarrhs I have pointed out in the Synopsis many instances occurring from the 14<sup>th</sup> Century down to the present day. In all these instances, the phenomena have been much the same; & the disease has been always particularly remarkable in this, that it has been the most widely, & generally spreading epidemic known?\*

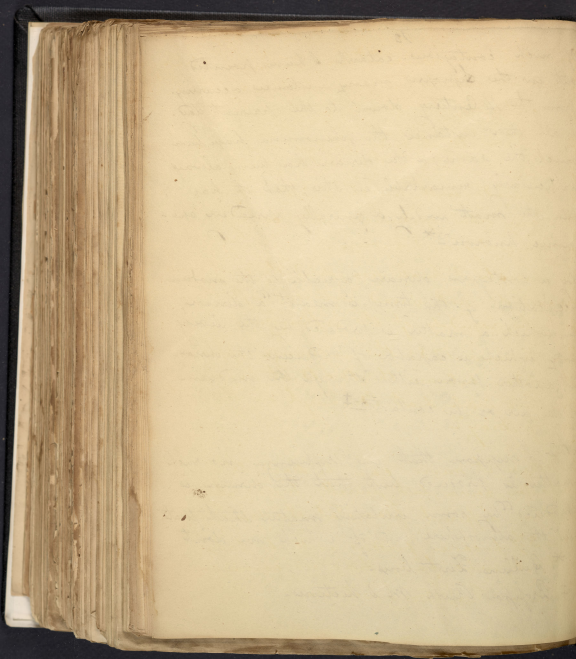
By a contagious disease (agreeable to the modern acceptation of the term) is meant a disease, in which a matter is produced by the living body, which is capable of producing the disease in another person, either through the medium of the air, or by contact.†

Now I suppose that in Influenza no such matter is produced, but that the disease is produced by some irritating matter that floats in the atmosphere, and of which we doubt

\* Cullen's First lines.

† Professor Rush M.D. lectures.





understand the nature? \* And in every case is produced entirely independent of any thing like contagion.

My objections to its being contagious are the following.

1. It spreads with much more rapidity than any other epidemic (either contagious or noncontagious) known.

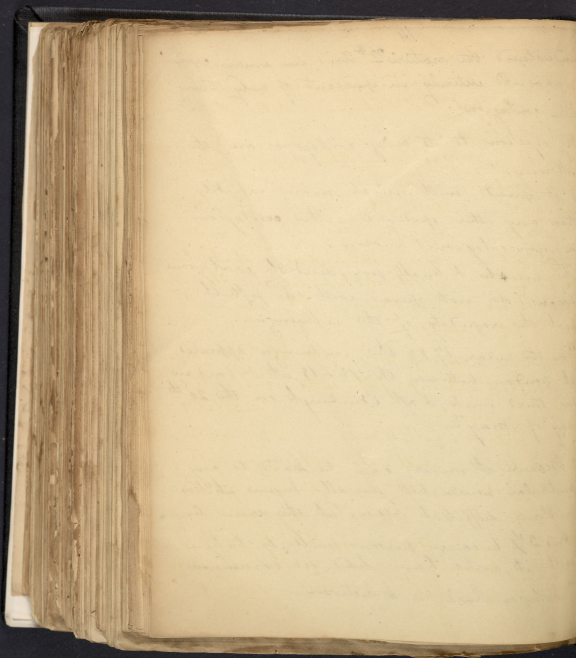
The measles, & small pox (decidedly contagious diseases) do not spread with one fiftieth part the rapidity of the influenza.

"On the year 1782 the influenza appeared at London between the 12<sup>th</sup> & 18<sup>th</sup>, at Oxford in the third week, & at Edinburgh on the 20<sup>th</sup> day of May<sup>2</sup>.

2 Because it never can be traced to any particular source, but generally begins at two or three different places at the same time.

And 3<sup>rd</sup> because persons will be taken with it, who have had no commun-

\* Professor Rush in 2 lectures.



-cation with their neighbours, (as I myself frequently saw last season) and sailors frequently take it at sea while it prevails on land -

"On the year 1788, when the ship *Atlap* left Malacca, there was no epidemic disease in that place; yet upon her arrival in Canton, it was found that at the very same time that the crew on board the *Atlap* in the China seas had the influenza, the disease raged at Canton?"

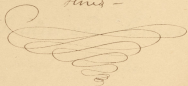
"On the second of May 1782, the late admiral *Kempenfelt* sailed from Spithead with a squadron under his command, of which the *Goliath* was one, whose crew was attacked with the influenza, on the 29<sup>th</sup> of the month; the rest were affected at different times; & so many of the men were rendered incapable of duty by this prevailing sickness, that the whole squadron was obliged to return



into port about the second week in June,  
not having had communication with any  
shore, & having cruized solely between Port  
& the Lizard - \*

Many other quotations might be brought  
forward in favour of the noncontagious  
nature of this disease, but these are  
thought sufficient.

Finis -



\* Lond. Med. Trans. Vol 3. Page 61 -

